

Occupational Health Indicators: Montana 2004-2014

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(MOHSS)

DLI ERD DMU

Disclaimer

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Montana Occupational Health and Safety Surveillance Program (MOHSS)

- Occupational health surveillance: identify, track, and monitor work-related injuries and illnesses and their causes, in order to identify and remediate unsafe workplace activities, hazards, and exposures.
- MOHSS: Bridge the gap between occupational health surveillance and prevention and safety activities in Montana. Monitor the occupational health landscape.
 - Funded by NIOSH/CDC (5 year grant)

Occupational Health Indicators (OHIs)

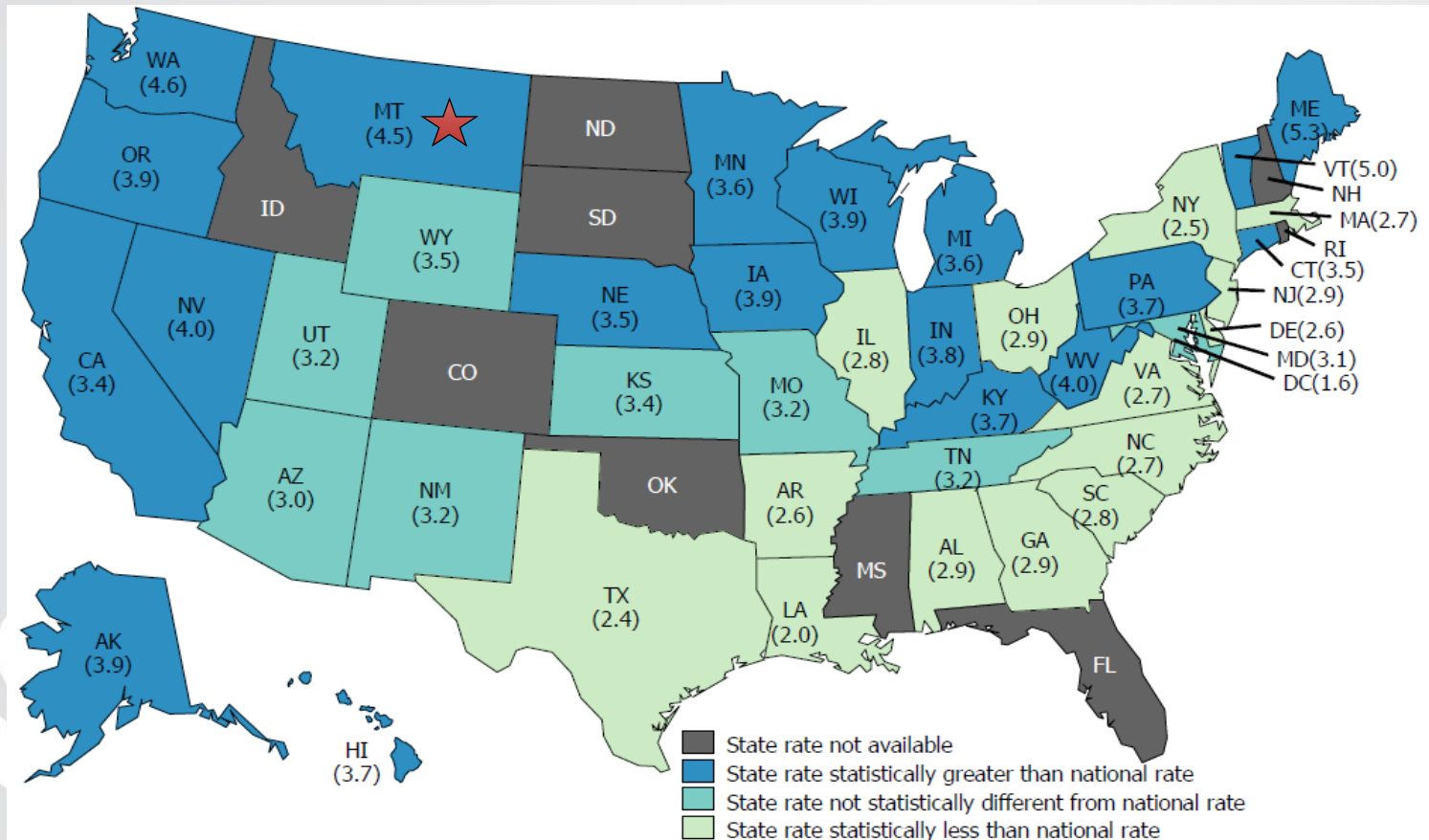
- **Indicator 1: Non-Fatal Work-Related Injuries and Illnesses**
- Indicator 2: Work-Related Hospitalizations
- **Indicator 3: Fatal Work-Related Injuries**
- Indicator 4: Work-Related Amputations with Days Away From Work
- **Indicator 5: Workers' Compensation Claims for Amputations with Lost Work-Time**
- Indicator 6: Hospitalizations for Work-Related Burns
- **Indicator 7: Work-Related Musculoskeletal Disorders with Days Away From Work**
- Indicator 8: Workers' Compensation Claims for Carpal Tunnel Syndrome with Lost Work-Time
- Indicator 9: Hospitalizations from or with Pneumoconiosis
- Indicator 10: Mortality from or with Pneumoconiosis
- Indicator 11: Acute Work-Related Pesticide-Associated Illness and Injury Reported to Poison Control
- **Indicator 12: Incidence of Malignant Mesothelioma, ages 15 and older**
- Indicator 13: Elevated Blood Lead Levels (BLL) Among Adults
- **Indicator 14: Percentage of Workers Employed in Industries at High Risk for Occupational Morbidity**
- **Indicator 15: Percentage of Workers Employed in Occupations at High Risk for Occupational Mortality**
- **Indicator 16: Percentage of Workers Employed in Industries and Occupations at High Risk for Occupational Mortality**
- Indicator 17: Occupational Safety and Health Professionals
- Indicator 18: OSHA Enforcement Activities
- Indicator 19: Workers' Compensation Awards
- Indicator 20: Work-Related Low Back Disorder Hospitalizations
- Indicator 21: Asthma Among Adults Caused or Made Worse by Work
- Indicator 22: Work-Related Severe Traumatic Injury Hospitalizations
- Indicator 23: Influenza Vaccination Coverage Among Healthcare Personnel
- Indicator 24: Occupational Heat-Related Emergency Department Visits



Lions, Tigers, Incidence Rates...Oh My!

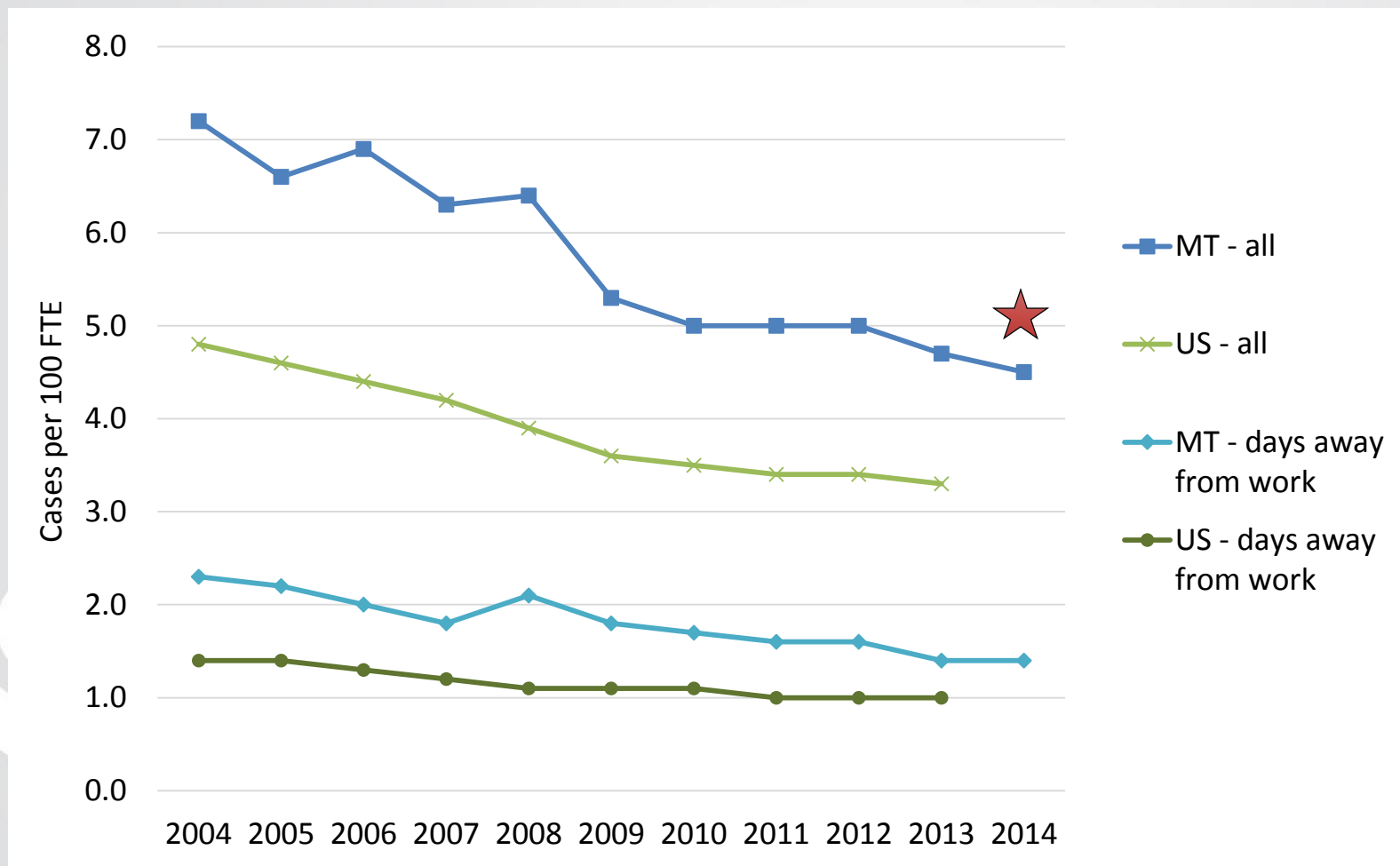
- Two main types of rates in epidemiology:
 - Prevalence – old + new cases (“snapshot”)
 - Incidence – new cases
- Incidence rate:
 - # new cases of an outcome / population at risk for the outcome, during a specific period of time
- Incidence rate must always include description of the outcome that it represents
 - **Incidence rate of non-fatal work-related injuries and illnesses per 100 full-time employees (FTE), per year**

OHI #1: State non-fatal occupational injury and illness incidence rates (per 100 FTE) compared to the national rate, private industry, 2014.



Source: Chart from the Survey of Occupational Injuries and Illnesses Summary Estimates Charts Package, BLS

OHI #1 – Estimated incidence rates (per 100 FTE) of all non-fatal work-related injuries and illnesses, and cases with days away from work, in Montana and U.S., 2004-2014.



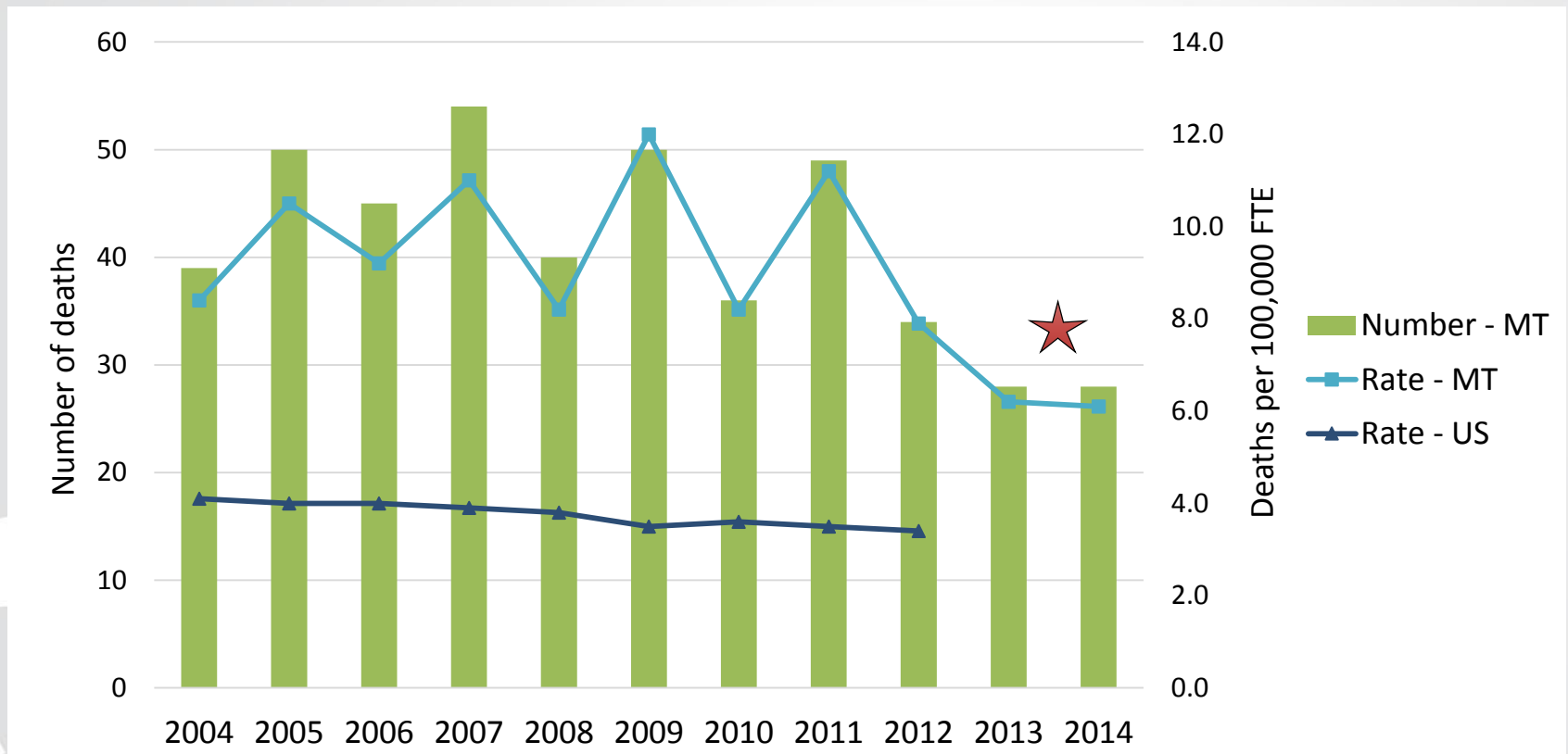
Source: BLS Survey of Occupational Injuries and Illnesses (SOII)

OHI #1: Non-fatal work-related injuries and illnesses, 2014

- By Industry (rates per 100 FTE)
 - Agriculture, forestry, fishing, hunting (8.8)
 - Manufacturing (6.4)
 - Education and health services (6.2)
 - Accommodation and food services (5.3)
 - Construction (5.3)
- By Occupation (counts)
 - Nursing assistants (220)
 - Retail salespersons (210)
 - Heavy & tractor trailer truck drivers (210)
 - Construction laborers (160)

OHI #3: Work-related fatalities

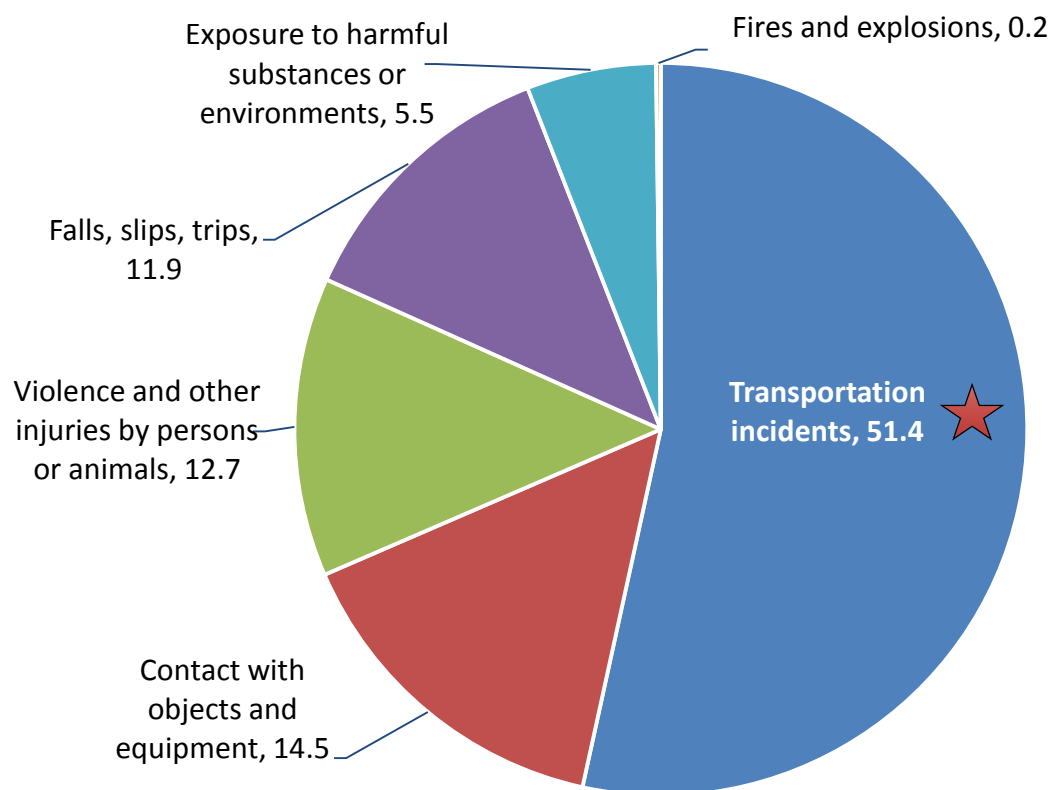
Figure 3.1 – Number and incidence rate (per 100,000 FTE) of fatal work-related injuries in Montana and U.S.



Source: BLS Survey of Occupational Injuries and Illnesses (SOII) (private industry)

OHI #3: Work-related fatalities

Figure 3.2 – Percentage of fatal work-related injuries by event or exposure, 2004-2014.



Fatalities by Industry (2004-14)

- **Agriculture, forestry, fishing, and hunting (33.6%)**
- **Trade, transportation, and utilities (20.2%)**
- **Construction (12.3%)**

Source: BLS Census of Fatal Occupational Injuries (CFOI). Counts included if met CFOI publication criteria.



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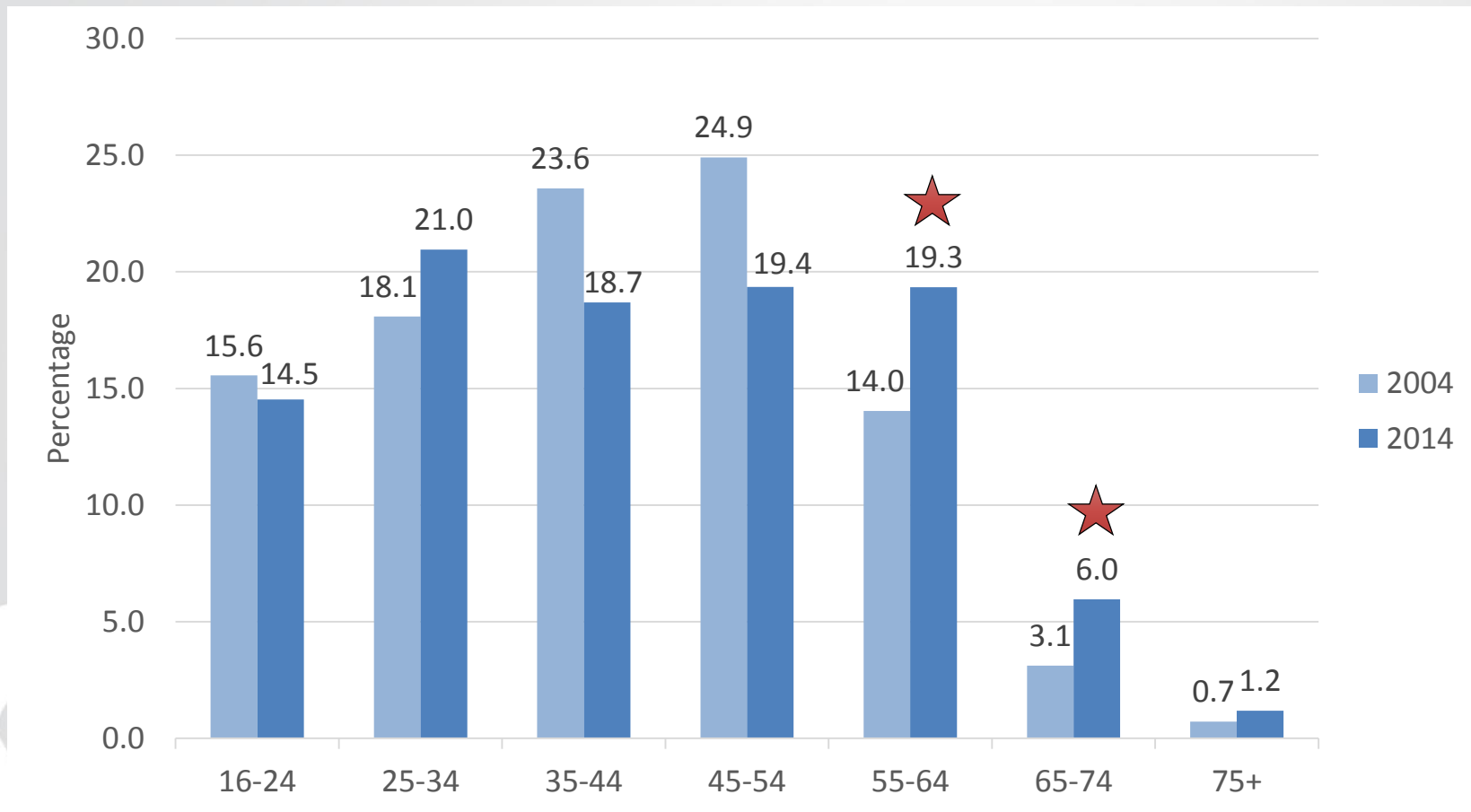
DRIVER BEHAVIOR CONTRIBUTES TO 94% OF ALL CRASHES.



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Aging Workforce in Montana

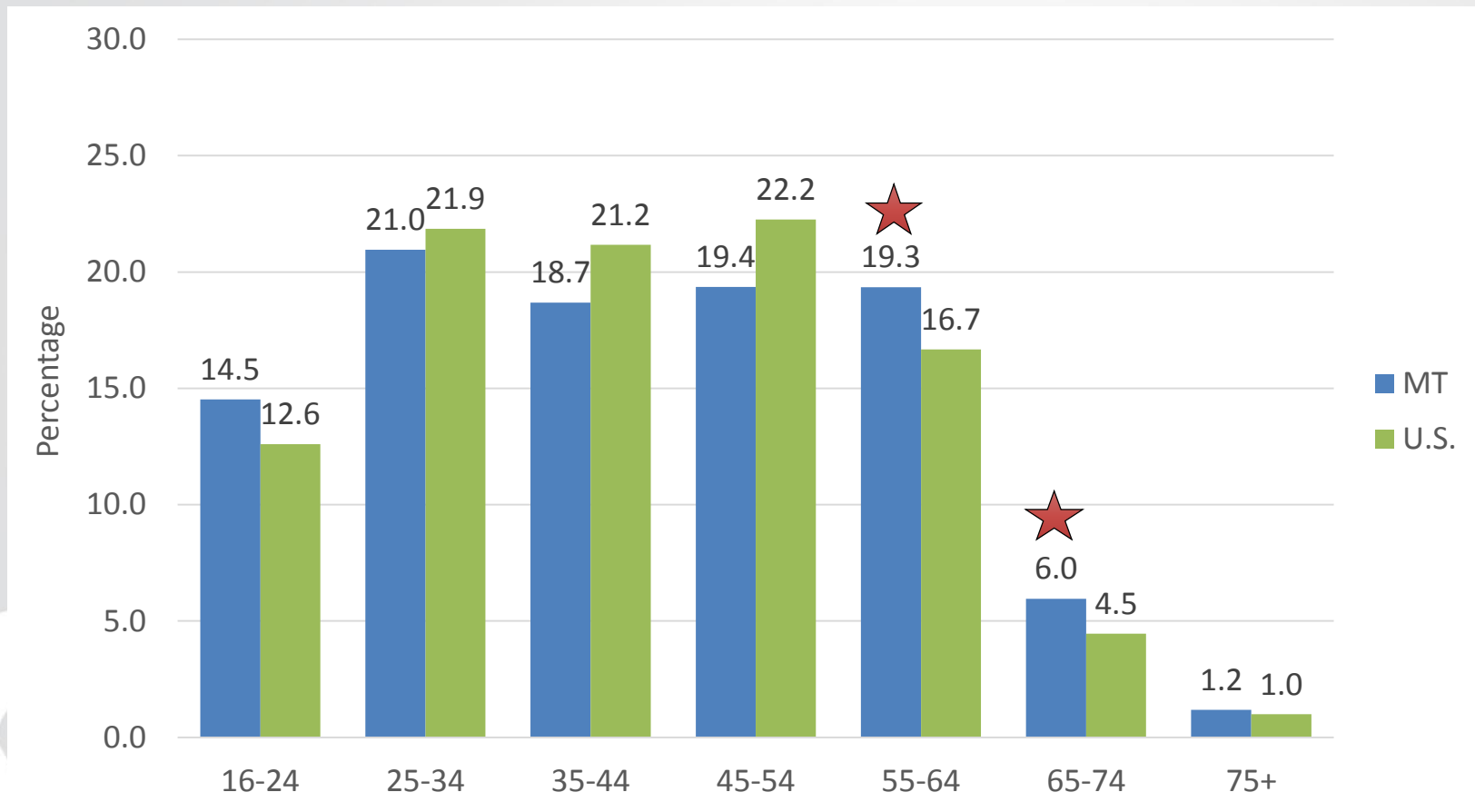
Figure P.7 – Percentage of employed persons by age in Montana, 2004 and 2014



Source: BLS Geographic Profiles of Employment and Unemployment

Aging Workforce in Montana

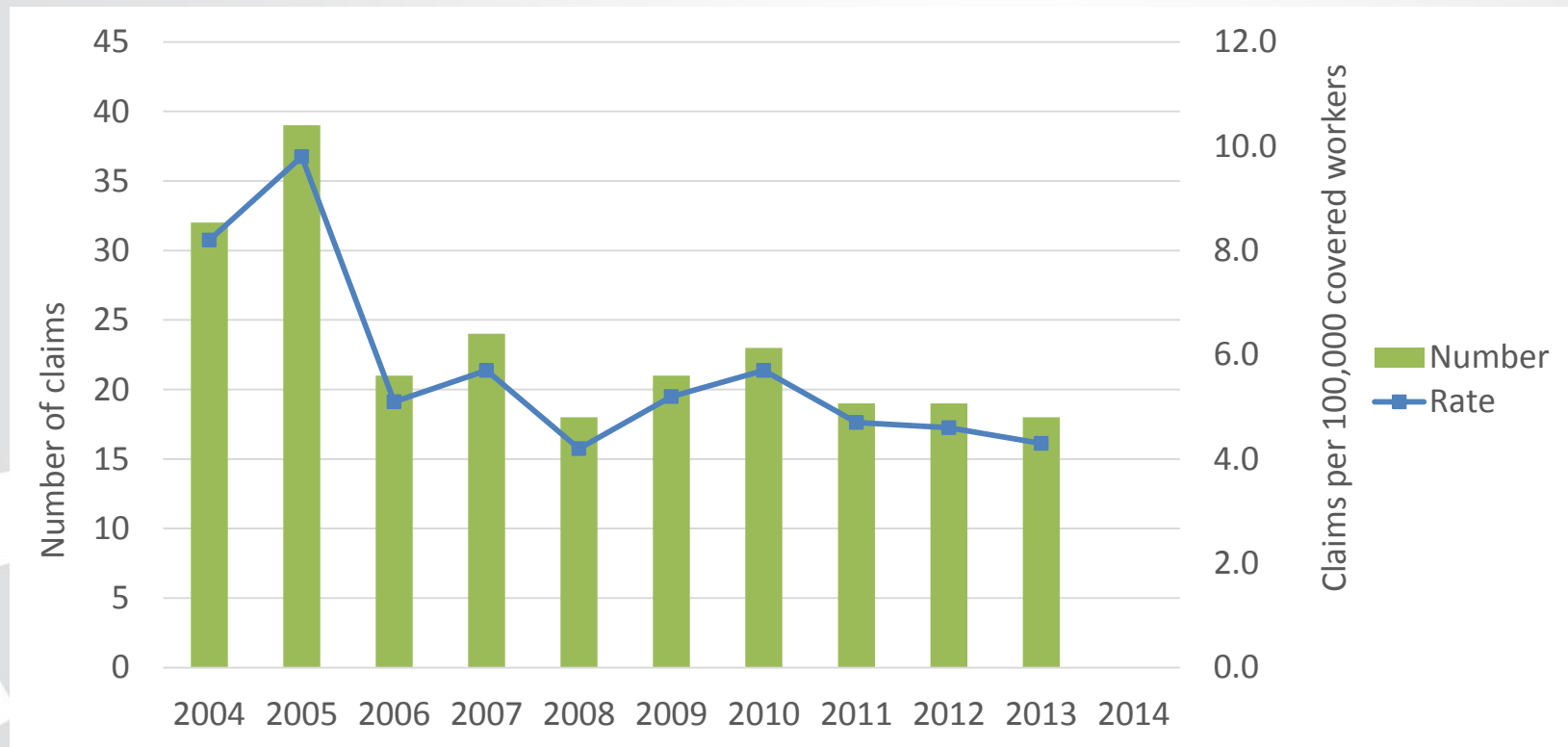
Figure P.8 – Percentage of employed persons by age in Montana and U.S., 2014



Source: BLS Geographic Profiles of Employment and Unemployment

OHI #5: Amputations Identified in Workers' Compensation System

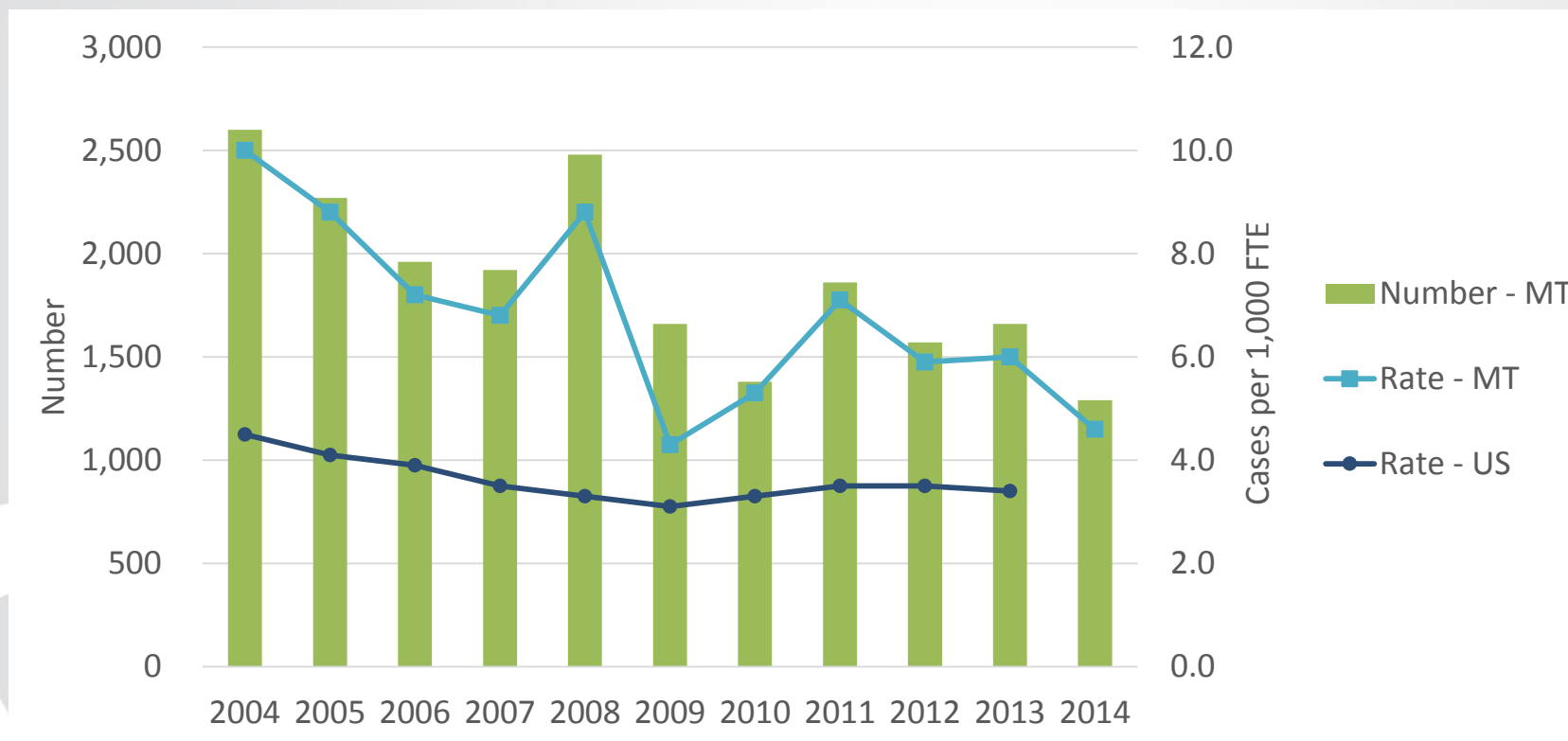
Figure 5.1: Number and incidence rate of amputations with lost work-time filed with workers' compensation in Montana, 2004-2013



Source: Montana Workers' Compensation Network (WCAN), National Academy of Social Insurance (NASI). 2014 data is not yet available.

OHI #7: Work-related Musculoskeletal Disorders with Days Away From Work

Figure 7.1 – Number and incidence rate (per 1,000 FTE) of all MSD cases involving days away from work in Montana and the U.S., 2004-2014



Source: BLS Survey of Occupational Injuries and Illnesses (SOII)

OHI #12: Incidence of Malignant Mesothelioma

Figure 12.1 – Number and age-standardized incidence rate (per million residents) of malignant mesothelioma in Montana, 2004-2014



Source: Montana Department of Public Health and Human Services Cancer Registry

OHI #12: Incidence of Malignant Mesothelioma

- **125** cases of mesothelioma diagnosed 2005-2014
 - Mean age at diagnosis = 72 years old
 - 4.8% of cases diagnosed at less than 50 years of age.
 - Males = 71.2% of the mesothelioma cases
- From 1979 to 2002, the counties with the highest number of mesothelioma cases:
 - Cascade (28)
 - Yellowstone (23)
 - Flathead (16)
 - Missoula (16)
 - Lincoln (12)



OHI #14: Workers at High Risk for Injury & Illness, 2014

- **5.7%** of MT workforce employed in “high-risk industries”
- High-risk industries with the most workers:
 - Nursing care facilities
 - Retirement communities/assisted living facilities
 - Couriers and express delivery services
 - Veterinary services
 - Skiing facilities
- **18.1%** of MT workforce employed in “high risk occupations”
- High-risk occupations with the most workers:
 - Driver/sales workers and truck drivers
 - Freight, stock, and material movers (hand)
 - Construction laborers
 - Nursing/psychiatric/home health aides
 - Janitors and building cleaners

OHI #16: Workers at High Risk for Occupational Fatality

- 2013 – **25.1%** of employed workers worked in industries with high risk of occupational mortality
 - National percentage = 15.4%
- 2013 – **19.1%** of employed workers worked in occupations with high risk of occupational mortality
 - National percentage = 12.5%



Collaboration is key!



Thank you!

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